WHAT IS CLAIMED IS:

- 1. A rotor driving apparatus comprising:
- a casing;

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- a rotor rotatably disposed within the casing;
- a driving unit supported to the casing for rotationally driving the rotor;
 - a supporting portion that elastically supports the driving unit to the casing, the supporting portion having a vibration isolation rubber;
- a temperature sensor that detects a temperature of the supporting portion or an ambient area thereof and outputs temperature data;
 - a temperature adjusting device that performs one of cooling and heating of the supporting portion; and
 - a controller that controls a temperature generated by the temperature adjusting device based on the temperature data from the temperature sensor.
 - 2. The rotor driving apparatus as claimed in claim

 1, wherein the temperature adjusting device comprises a

 Peltier element.
 - 3. The rotor driving apparatus as claimed in claim 1, wherein the temperature adjusting device comprises a cooling device.
 - 4. The rotor driving apparatus as claimed in claim

 1, further comprising cooling means for cooling the

driving unit, and wherein the temperature adjusting device comprises a heating device.

- 5. The rotor driving apparatus as claimed in claim 1, wherein the temperature adjusting device comprises a thermistor.
 - 6. A rotor driving apparatus comprising:
 - a casing;

- a rotor rotatably disposed within the casing;
- a driving unit supported to the casing for rota
 10 tionally driving the rotor;
 - a supporting portion that elastically supports the driving unit to the casing, the supporting portion having a vibration isolation rubber;
- a thermistor that heats the supporting portion or

 an ambient area thereof to a predetermined temperature;

 and,
 - a constant-voltage circuit for applying a constant voltage to the thermistor.
 - 7. A centrifuge comprising:
- a casing;
 - a rotor rotatably disposed within the casing, test tubes each containing a testing sample therein being held in the rotor for centrifugal separation;
- a driving unit supported to the casing for rotationally driving the rotor;

- a supporting portion that elastically supports the driving unit to the casing, the supporting portion having a vibration isolation rubber;
- a temperature sensor that detects a temperature of the supporting portion or an ambient area thereof and outputs temperature data;
- a temperature adjusting device that performs one of cooling and heating of the supporting portion; and
- a controller that controls a temperature generated by the temperature adjusting device based on the temperature data from the temperature sensor.
- 8. The centrifuge as claimed in claim 7, wherein the temperature adjusting device comprises a Peltier element.
- 9. The centrifuge as claimed in claim 7, wherein the temperature adjusting device comprises a cooling device.
 - 10. The centrifuge as claimed in claim 7, further comprising cooling means for cooling the driving unit, and wherein the temperature adjusting device comprises a heating device.
 - 11. The centrifuge as claimed in claim 7, wherein the temperature adjusting device comprises a thermistor.
 - 12. A centrifuge comprising:
- 25 a casing;

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a rotor rotatably disposed within the casing, test tubes each containing a testing sample therein being held in the rotor for centrifugal separation;

a driving unit supported to the casing for rotationally driving the rotor;

a supporting portion that elastically supports the driving unit to the casing, the supporting portion having a vibration isolation rubber;

a thermistor that heats the supporting portion or an ambient area thereof to a predetermined temperature; and,

a constant-voltage circuit for applying a constant voltage to the thermistor.

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